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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,316	09/29/2003	Zohar Bogin	42P9348D2	4663

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EXAMINER

VO, TIM T

ART UNIT	PAPER NUMBER
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2112

DATE MAILED: 01/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/674,316

Applicant(s)

BOGIN ET AL.

Examiner

Tim T. Vo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 19-27 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Part III DETAILED ACTION

Notice to Applicant(s)

This application has been examined. Claims 10-27 are pending.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

1. Group I, claims 10-18, drawn to Counting, Scheduling or event timing, which is classified in class 713, subclass 502.
2. Group II, claims 19-27, drawn to Alternately filling or emptying buffers, which is classified in class 710, subclass 53.

In accordance with 37 CFR 1.499, applicant is required, in response to this action, to elect a single invention to which the claims must be restricted.

3. A telephone call was made to Mr. Micheal Mallie (36,591) on January 10, 2005 to request an oral election to the above restriction requirement. Mr. Mallie elected group I claims 10-18 without traverse.
4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventor ship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventor ship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

6. Claims 1-3 of patent 6,669,390 contain every element of claims 10-27 of instant application and as such anticipates claims 10-27 of the instant application. Therefore, claims 10-27 of the instant application is not patently distinct from the earlier patent claims and as such is unpatentable for obvious-type double patenting.

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim Rejections - 35 USC § 102

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 11, 12-13, 15-16 and 18 are rejected under 35 U.S.C. § 102(e) as being anticipated by Ader et al. patent number 6,021,483.

As for claim 10, Adar teaches a method, comprising: dispatching a bus transaction from a requestor to a device (see figure 1-2, bridge 160 and primary master interface 240 is being requestor, secondary target is being a device (see column 1 lines 45-53); starting a timer (see figure 2, timing logic for counting timer from the time the master asserts FRAME# issuing a read or non-posted write transaction (see column 2 line 66 to column 3 line 3 and column 5 lines 12-16); determining if the timer expires before the device responds to the dispatched bus transaction (see column 5 lines 12-25, wherein the timing logic determines whether the transaction from the master to the target is within the timing delay allowed or exceeding (column 5 lines 61-64); and issuing a deferred transaction response to the requestor if the timer expires (see column 5 lines 12-25, wherein the bridge 160 issues a retry to the master when the timing logic

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issues a timer expired signal and the bridge 160 issues a retry signal to the master when transaction exceeding the timing delay allowed).

As for claim 12, Adar teaches the method of claim 10, wherein issuing includes issuing an unconditionally deferred transaction (see column 5 lines 12-25).

As for claim 13 Adar teaches an apparatus, comprising: a command dispatcher coupled to a command queue (see figure 1-2, bridge 160 and primary master interface 240 is being command dispatcher, secondary target is being a command queue (see column 1 lines 45-53); a detector coupled to the command dispatcher to detect if a command dispatched to the command queue by the command dispatcher has been responded to (see figure 2, timing logic located in PDTR 270 detects timing transaction within the delay time allowed of exceeding); a timer coupled to the detector (see figure 2, timing logic for counting timer from the time the master asserts FRAME# issuing a read or non-posted write transaction (see column 2 line 66 to column 3 line 3 and column 5 lines 12-16); and logic coupled to the timer to issue a deferred response to the requestor if the timer expires before the command has been responded to (see column 5 lines 12-25, wherein the bridge 160 issues a retry to the master when the timing logic issues a timer expired signal and the bridge 160 issues a retry signal to the master when transaction exceeding the timing delay allowed).

As for claim 15, Adar teaches the apparatus of claim 13, wherein the timer is a programmable timer (see column 3 lines 16-17).

As for claim 16, Adar teaches a machine-readable medium having stored thereon instructions, which when executed by at least one machine cause said at least one

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machine to perform: receiving a bus transaction from a requestor to a device; starting a timer; determining if the timer expires before the device responds to the dispatched bus transaction; and issuing a deferred transaction response to the requestor if the timer expires.

As for claim 18, Adar teaches the medium of claim 16, wherein issuing includes issuing an unconditionally deferred transaction.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11, 14 and 17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ader et al. patent number 6,021,483 in view of Ljungberg et al. 5,493,566.

As for claims 11, 14 and 17, Ader does not expressly teach starting occurs only if an in-order queue has a depth of 1. However, Ljungberg teaches buffer detection by constantly monitored the buffer is being full (see column 6 lines 31-48). Therefore, it would have been obvious to a person of an ordinary skill in the art at the time the invention was made to have combined the teachings of Ljungberg into the teachings of Ader because Ljungberg providing Ader's buffer data availability detection to preventing the buffer is overfull and the consequence would loose of data in transmission.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tim T. Vo whose telephone number is 571-272-3642. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on 571-272-3632. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



1/14/05

Tim T. Vo
Primary Examiner
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